

USSN 10/675,138  
Amdt. dated May 10, 2006  
Reply to Office action of January 25, 2006

2

**Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings of claims in the application:

**Listing of Claims:**

1. (Cancelled)
2. (Previously Presented) A method according to claim 17 wherein the material has a Si: Sb ratio of less than 5.
3. (Previously Presented) A method according to claim 17 wherein the one or more elements is present in the material at a concentration in the range from about 0.5 to about 30.0 weight %.
4. (Original) A method according to claim 2 wherein the one or more elements is present in the material at a concentration in the range from about 0.5 to about 30.0 weight %.
- 5-6. (Cancelled)
7. (Previously Presented) A method according to claim 17 in which the aqueous solution has a pH <7.
8. (Cancelled)
9. (Previously Presented) A method according to claim 17 in which the metal ions are radioactive metal ions.
10. (Original) A method according to claim 9 in which the radioactive metal ions comprise Sr, Cs, Co, Pu or Am ions.
- 11-16. (Cancelled)

USSN 10/675,138  
Amdt. dated May 10, 2006  
Reply to Office action of January 25, 2006

3

17. (Previous presented) A method of extracting metal ions from an aqueous solution comprising contacting the aqueous solution with a material consisting essentially of antimony silicate doped with one or more elements selected from the group consisting of tungsten, niobium and tantalum which material has been obtained by reacting together in a liquid medium a silicon -containing compound, an antimony containing compound and a compound containing one or more of the elements in the presence of an acid.
18. (Previously Presented) The process of claim 17 wherein the acid is a polymerization catalyst.
19. (Currently amended) The method of claim 1 ~~17~~ wherein the material is a crystalline antimony silicate material.
20. (Previously Presented) The method of claim 9 in which the aqueous solution is acidic and contains at least one background ions Na, K, Mg or Ca ions at a higher concentration than the concentration of the radioactive metal ions.
21. (Previously Presented) The method of claim 9 in which the aqueous solution is acidic and contains at least one background ion Na, K, Mg, or Ca ions, and in which the radioactive metal ions are selectively removed from the aqueous solution, the background ions being left behind in the aqueous solution.
22. (New) A method of extracting metal ions from an aqueous solution comprising contacting the aqueous solution with a material consisting essentially of antimony silicate doped with one or more elements selected from the group consisting of tungsten, niobium and tantalum.